CHAPTER 8

International Trade and Investment

The United States derives substantial benefits from open trade and investment flows. Over many decades, increased trade and investment liberalization has been an important catalyst for greater productivity growth and rising average living standards in the United States.

Trade liberalization and globalization remain controversial subjects because competition invariably raises both anxieties and opportunities. Reducing obstacles to trade can help economies grow more rapidly in the long run and create better, higher paying jobs. Increased competition, however, can lead to hardships for others in the short run. Constructive policies that help displaced workers train for and find new work and increase the portability of pension and health benefits can help to ease adjustment.

The key points in this chapter are:

- Engagement in the global economy through increased trade has contributed to rising average living standards in the United States. Firms engaged in international trade are more productive, have higher employment growth, and are higher wage firms than domestically oriented firms. Looking ahead, international trade liberalization in services presents significant opportunities for U.S. workers, firms, and consumers.
- Foreign direct investment (FDI) flows into the United States benefit the U.S. economy by stimulating growth, creating jobs, and financing the current account deficit. FDI flows into the United States also stimulate investment in research and development in high-technology areas that promote innovation and competitiveness.
- U.S. direct investment abroad is an important channel of global market access for U.S. firms. U.S. multinational companies have contributed to productivity growth, job creation, and rising average living standards in the United States.

Trade Liberalization: A Key Contributor to the Strength of the U.S. Economy

Increased international trade has raised real incomes, restrained prices, introduced greater product variety, spurred technological advances and innovation, and raised living standards in the United States. Studies have estimated that the annual payoff from U.S. trade and investment liberalization to date, including from the Kennedy Round, the Tokyo Round, the Uruguay Round, the North American Free Trade Agreement and other free-trade agreements, is up to \$1.5 trillion. These gains arise through many channels: higher long-term levels of commerce in goods and services that come from trade and investment liberalization; increased product variety; more efficient allocation of resources; and better transportation and communication technology. Some economists have conjectured that trade liberalization alone has accounted for about half of these gains, which implies that the annual income gain from trade liberalization to date is over \$2,500 per capita, or \$10,000 for an average American family of four. Existing studies suggest that U.S. incomes could rise further by approximately \$590 billion per year by moving all the way to global free trade in goods and services.

International trade in goods and services exposes firms to foreign competition and reduces their ability to charge high markups above production costs. International trade also increases the variety of goods available such as silk sweaters from China, wine from Australia, and winter blueberries from Chile. Consumers value variety and one study estimated that the U.S. economic value of increased varieties through imports over the past three decades is equivalent to \$350 billion per year, or 2.8 percent of gross domestic product (GDP).

Engagement in the global economy through increased trade has contributed to rising average living standards in the United States. Research shows that firms engaged in the international marketplace tend to exhibit higher rates of productivity growth and pay higher wages and benefits to their workers than domestically oriented firms. Economists agree that the most important determinant of living standards in a country is the average level of productivity, or output per worker.

A free and open international trade regime is vital for a stable and growing economy, both here at home and throughout the world. The United States will continue to work aggressively toward multilateral trade liberalization through the World Trade Organization's Doha Development Agenda negotiations. The prospects for these negotiations to produce significant benefits for this country and our trading partners, particularly developing countries, demand that we promptly reach a balanced and ambitious outcome.

Firms That Engage in International Trade Are Strong Performers

At the microeconomic level, firms engaged in international trade outperform domestically oriented firms on many dimensions. Research has shown that firms engaged in international trade have higher productivity than their counterparts engaged solely in domestic activity. One study found that value added per employee, one simple measure of productivity, was 15 percent higher in manufacturing exporting firms than in firms that did not export (controlling for industry effects, plant size, and geographic location). And these productivity effects are reflected in higher wages: the wages paid by manufacturing plants that export are 9 percent higher on average than wages paid by non-exporting plants of the same size. Wages in service-oriented firms that export are, on average, 13 percent higher than their purely domestic counterparts of the same size.

One recent study that examined the dynamics of globally engaged firms between 1993 and 2000 found that firms engaged in international trade had a higher survival rate (65 percent) than the average for all firms in the country (53 percent). In addition, a firm that began to trade during this time period increased employment by nearly 100 percent on average, while a firm that quit trading experienced a decline in employment.

An increasing number of American workers are employed by firms engaged in international trade. Between 1993 and 2000, firms that trade increased employment by 9.8 million workers, and the share of the American workforce employed by a firm engaged in trade increased from 40 percent to approximately 42 percent. Applied to today's workforce, this result implies that over 57 million American workers are currently employed by a firm that engages in international trade.

The Effects of Nontariff Barriers on International Trade

While trade can generate many economic benefits, governments at times set up barriers to international trade. One of the more common and harmful barriers is a *nontariff barrier*, a barrier behind the border that is a policy (other than a tariff or tax) or official practice that can unfairly inhibit competition. Unjustified nontariff barriers can distort the prices and quantities of goods and services traded internationally, restrict international investment, and reduce economic welfare in exporting and importing countries. As tariffs have fallen both in the United States and in many other countries, nontariff barriers have increased in importance and are often cited as more trade-restricting than tariffs. Nontariff barriers can arise as a result of government policies aimed explicitly at protecting domestic firms from international competition, or from rules or laws within a country that effectively hinder trade (see Box 8-1).

Box 8-1: Nontariff Barriers Restrict Trade

Unjustified nontariff barriers (NTBs) make it more difficult for international goods and services to compete freely and fairly with those produced domestically. Common examples of NTBs are burdensome or nontransparent product standards or regulations. For example, in Korea, pharmaceutical imports must be tested on Korean nationals, and each individual batch produced must undergo testing. In China, the process of standards certification for telecommunications and IT products can be burdensome and unpredictable, as two separate Chinese regulatory agencies each check for conformity to the same set of standards. Other often-cited NTBs include investment restrictions, government procurement laws, and lax enforcement of intellectual property rights.

Measuring the effects of NTBs on trade is more difficult than assessing the effects of tariffs, but some attempts have been made. A growing body of evidence consistently shows that the economic welfare gains from eliminating NTBs are at least as large as those obtained from further tariff liberalization. One study shows that the U.S. payoff from eliminating NTBs with just seven of our trading partners (Australia, Canada, Germany, Italy, Japan, the Netherlands, and Great Britain) would generate annual income gains of $90 billion for the United States (0.72 percent of GDP), compared with $37 billion from tariff liberalization (0.30 percent of GDP). These benefits arise largely from the pro-competitive effects of increased international trade and more efficient allocation of resources.

Tariff negotiations are fairly straightforward, and forums such as the World Trade Organization (WTO) exist for this purpose. Members are required to report their tariff schedule to the WTO each year, so members know the tariff rate for each product in every country. However, countries do not always agree on what constitutes a NTB and there is no formal, consistent notification process, thereby making negotiations aimed at addressing such barriers more complicated. Part of the policy problem is making distinctions as to whether NTBs are warranted for nontrade reasons (e.g., product safety standards) or whether they are simply covert barriers to imports (nontransparent licensing requirements for foreign firms). For instance, customary regulatory and legal procedures within one country might be seen as complex and overly burdensome to would-be exporters.

Apart from the challenges of identifying NTBs, policymakers face difficulties in knowing which NTBs they should seek to dismantle first. The U.S. Department of Commerce has surveyed its industry and trade experts and country desk officers in an effort to identify the most prevalent NTBs faced by U.S. exporters and to identify which export products are most likely affected. The survey results suggest that, on average, at least one NTB affects U.S. exporters for each major product category in which they export to our main trading partners. For instance, a problematic regulatory environment was cited as a problem in 43 of the 49 countries covered by the survey, and was cited as the top problem in 14 of those countries. The industries facing the most NTBs included entertainment, pharmaceuticals, and information technology.

International Trade in Services

Liberalizing trade in services is important for economic growth here and abroad. As an economy grows and matures, services tend to increase as a share of GDP and as a share of trade. The United States has a global competitive advantage in services, yet services remain highly protected abroad.

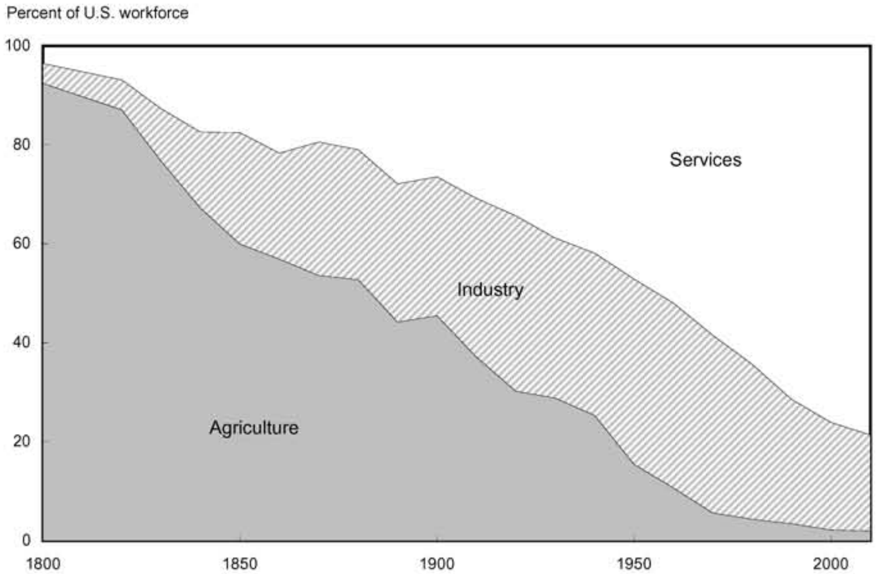
Services such as financial, insurance, transportation and storage, telecommunications, express delivery, and business services generate 68 percent of world GDP but account for just under 20 percent of global trade. While global advances in information and communications technology are making services increasingly tradable, existing trade barriers to services are significant. These barriers are currently subject to negotiation in a host of bilateral, regional, and multilateral trade talks.

U.S. Competitive Advantage in Services

A large and growing part of the U.S. economy and workforce is employed in services. In 1800, 9 out of 10 American workers were employed in agriculture; today that number is less than 1 in 10 (Chart 8-1). In contrast, nearly 8 in 10 American workers are employed today in the service sector.

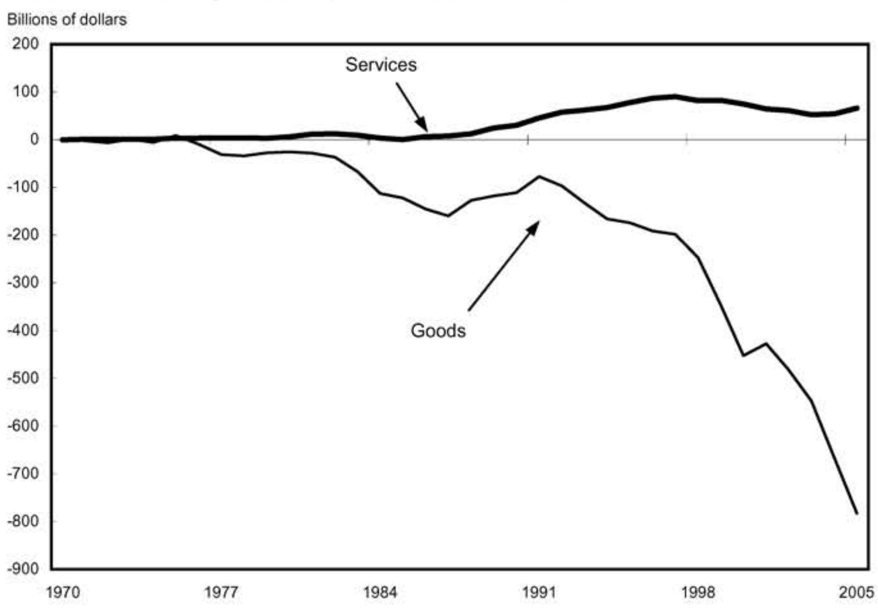
The vast economic benefits from trade liberalization for services stem in part from our competitive advantage in services. That is, the United States can produce many services at a lower cost than our trading partners, and our trading partners can produce some other set of goods and services at a lower cost than the United States. When we trade our lower cost services for their lower cost goods, we and our trading partners gain from trade. Chart 8-2 shows the changing structure of U.S. trade, which in part mirrors the changing structure of the U.S. economy. Since the 1970s, the United States has consistently run a surplus in services trade, with a $66 billion surplus in 2005.

Chart 8-1 **Percent of Private U.S. Workforce by Sector, 1800–2005**
A large and growing share of the private U.S. workforce is employed in services.



Note: Industry includes manufacturing, construction, and mining.
Source: Federal Reserve Bank of Dallas.

Chart 8-2 **Trade Balance by Sector, 1970–2005**
The U.S. trade deficit in goods and surplus in services have increased.



Source: Department of Commerce (Bureau of Economic Analysis).

Technological Change Is Fostering International Trade in Services

Services have become increasingly tradable, particularly knowledge-based or information technology-enabled services that are beyond the traditional notion of internationally traded services such as transportation, travel, and tourism. For many of these services, a physical commercial presence is necessary. For example, a financial institution is able to offer a host of financial products to international clients, but the multinational firm must still set up intermediary branches to serve their clients overseas. Other services can be delivered with virtually no physical presence. An increasingly wide range of commercial transactions ranging from stock trades, to manufacturing orders, to airline reservations, can occur almost entirely over networked digital media located in many countries around the world.

Trade in services previously involved high transaction costs between businesses and customers. Technological innovations and changes in global technology such as the Internet, information technology (IT) hardware such as personal computers, and IT networks have greatly reduced communication and transaction costs for trade in services.

Table 8-1 reports U.S. trade in private services. The largest subcategories in "other private services" trade, which captures many of the IT-enabled services, include financial and insurance services; computer, management, and consulting services; and other business, professional, and technical services.

TABLE 8-1.— *U.S. International Trade in Private Services, 2005*
(billions of dollars)

Total private services traded	Exports	Imports	Balance
Total private services traded	**$360.5**	**$280.6**	**$79.9**
Travel	81.7	69.2	12.5
Passenger fares	20.9	26.1	-5.1
Other transportation	42.2	62.1	-19.9
Royalties and license fees	57.4	24.5	32.9
Other private services	158.2	98.7	59.5
Education	14.1	4.0	10.1
Financial services	34.1	12.3	21.7
Insurance services	6.8	28.5	-21.7
Telecommunications	4.7	4.7	0.1
Business, professional, and technical services	80.8	47.7	33.1
Computer and information services	8.2	9.0	-0.7
Management and consulting services	6.4	5.9	0.5
Research and development and testing services	10.1	6.7	3.4
Operational leasing	9.4	1.3	8.1
Other business, professional, and technical services	46.6	24.8	21.8
Other services	17.7	1.5	16.2
Film and television tape rentals	10.4	0.9	9.5
Other	7.3	0.6	6.7

Source: Department of Commerce (Bureau of Economic Analysis).

Trade growth in "other private services" has far outpaced growth in the rest of services. From 1995 to 2005, U.S. exports of "other private services" grew 143 percent, compared with 44 percent growth in all other services. The bulk of the overall trade surplus in services comes from the "other private services" category, which accounted for 90 percent of the *overall* U.S. services trade surplus in 2005, up from 38 percent in 1995. In contrast, the surplus in more traditional services (e.g., travel and transportation) has fallen. The surplus in "other private services" has grown from $30 billion in 1995 to $60 billion in 2005, and the surplus in the rest of services has fallen from $48 billion to $7 billion. Many of these trends are consistent with the global IT advancements that have fostered international trade in services over the past decade.

High Barriers Restrict International Trade in Services

Barriers to trade in services are mostly regulatory and investment restrictions and tend to be higher than trade barriers in merchandise. For instance, U.S. banks that wish to offer retail banking services abroad face a host of barriers that limit their ability to compete in foreign markets. Examples of such barriers might be investment restrictions that limit the number of bank licenses the country will issue to a U.S. bank; requirements for U.S. banks to enter the banking market through a joint venture with a domestic bank; or limits on the degree of control that a U.S. bank can exercise over its foreign affiliate. Foreign firms wishing to enter the U.S. airline industry face ownership restrictions that limit their ability to compete with domestic firms.

Despite such barriers, services trade is expected to continue to grow. Research suggests that as countries' incomes grow, their demand for services and their trade in services will each grow more than one-for-one with income. U.S. producers are well-positioned to continue to engage in increased services trade, as many have already incorporated the technology in their operations to facilitate trade.

Looking Ahead to Larger Gains from Trade Liberalization

Despite decades of trade liberalization, the world economy is still far from a global marketplace of unfettered trade. Many of the remaining barriers lie in services, and the prospective gains for the United States from further trade reform are substantial. While global tariff liberalization in manufacturing and agriculture could generate over $16 billion in income for the United States each year, the prospective gains from services liberalization are immense: an estimated $575 billion in annual U.S. income (4.3 percent of GDP). Summing up, this is an additional $591 billion in annual income that will be foregone in the absence of further trade reform.

The magnitude of the payoff to the United States from services trade liberalization reflects a number of factors: the U.S. competitive advantage in many services, the large share of services in the global economy compared to the relatively small share of services in global trade, and the high barriers to services trade. These barriers are often regulatory in nature or involve restrictions on the form of investment, such as foreign equity restrictions that limit foreign investors' holdings and control in a company, transfer limitations on capital flows, and the repatriation of profits. Removing these barriers would free up capital to move across borders to the location with the highest rate of return.

Developing countries also stand to benefit greatly from global liberalization of services trade. The service sector share of GDP exceeds the manufacturing share in most developing countries. The increased availability and quality of services enhances the competitiveness of manufactured goods, agricultural products, and existing services. For instance, India stands to gain an estimated $12 billion in national income each year (1.7 percent of GDP) from removing barriers to trade in services, and China stands to gain an estimated $105 billion (4.0 percent of GDP) each year.

Foreign Direct Investment

International trade in goods and services is an important channel of international commerce, but it is not the largest channel. For many U.S. firms, foreign direct investment (FDI) is a more significant path to accessing foreign markets than are exports.

FDI is investment of foreign assets into domestic structures, equipment, and organizations (e.g., a manufacturing plant, an R&D facility, an office or a warehouse), whether in the form of acquisition or "greenfield" establishment. FDI is distinguished from passive portfolio investment (FDI does not include foreign investment in the stock market). Only the former can confer managerial or operational control. The two types of foreign direct investment are inward FDI and outward FDI. *Inward foreign direct investment* is generally understood to imply ownership by a foreign person or corporation of at least a 10-percent stake in a U.S. business enterprise. Similarly, *outward foreign direct investment* is ownership by a U.S. person or corporation of at least a 10-percent stake in a foreign business' operation abroad. A foreign automaker building or buying a production plant in the United States is an example of inward FDI, while a U.S. automaker building or buying a production plant in China is an example of outward FDI.

Before we examine each type of FDI and its importance to the U.S. economy, it is useful to define some of the terms that are commonly encountered when discussing FDI. A *multinational corporation* is a business enterprise (i.e., the parent) headquartered in one country that has at least a 10-percent ownership stake in a foreign business enterprise (i.e., the affiliate) in another country. That 10-percent ownership stake is the minimum stake used by many statistical agencies around the world, including those in the United States, for identifying meaningful managerial influence over the affiliate.

A *majority-owned U.S. affiliate* is an affiliate of a foreign-owned company that is located in the United States and has at least 50 percent foreign ownership (we focus on majority-owned U.S. affiliates here but use the term "U.S. affiliates"). Similarly, a *majority-owned foreign affiliate* is a foreign affiliate with at least 50 percent U.S. ownership.

U.S. firms are more reliant on FDI for the international delivery of services than they are for the international delivery of goods. While services are becoming increasingly tradable, their actual delivery often requires some physical presence, for example, distribution and express delivery services. Even with widespread use of ATMs and electronic banking, financial or retail banking often requires physical presence in the country in which services are being offered. Based on data from the Bureau of Economic Analysis for 2004, the ratio of sales by U.S.-owned services affiliates abroad to total U.S. services exports was 5.5, compared to 2.5 for goods. That is, U.S. firms deliver over five times the value of services through their foreign affiliates as they do through cross-border trade. Similarly, U.S. firms deliver 2.5 times the value of goods through their foreign affiliates as they do through cross-border trade.

Contributions of Inward FDI to the U.S. Economy

The United States receives inward FDI from firms and individuals located in countries from all over the world. Countries with the largest FDI positions in the United States include Great Britain, Japan, Germany, and Canada. These funds support firms across the U.S. economic landscape, from food, mining, and manufacturing firms to service sectors such as finance, telecommunications, and wholesale and retail trade. Every state in the United States is a recipient of foreign direct investment.

Presence of U.S. Affiliates

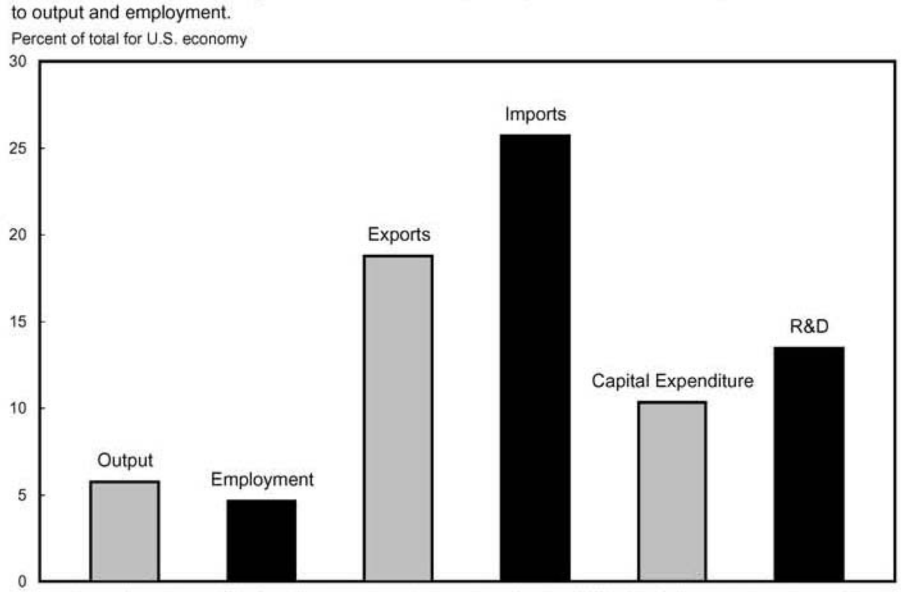
Decades of trade and investment liberalization both here and abroad have encouraged the growth of multinationals and global supply chains. Today, U.S. affiliates of foreign multinationals account for an important part of the U.S. economy. In 2004, the latest year for which data are available, U.S. affiliates owned $5.5 trillion in assets and had $2.3 trillion in sales. They produced $515 billion of goods and services inside the United States and accounted for 5.7 percent of total U.S. private output—up from 3.8 percent in 1988. U.S. affiliates employed 5.1 million workers or 4.7 percent of the

U.S. workforce in 2004—up from 3.6 percent in 1988. While historical data show upward trends in the presence of U.S. affiliates, since 2000 U.S. affiliate investment, output, and employment have leveled off or decreased slightly.

Microeconomic Benefits to the U.S. Economy

Inward FDI provides a number of benefits to the U.S. economy at the microeconomic level. Research has shown that multinationals are more productive than firms focused primarily on domestic markets. The relatively high productivity of U.S. affiliates of foreign-owned firms is attributable, in part, to their relatively high levels of investment in physical capital, R&D, and exporting and importing. Specifically, while U.S. affiliates account for 5.7 percent of output and 4.7 percent of employment, they account for a disproportionately high share of U.S. exports (19 percent), imports (26 percent), physical capital expenditures (10 percent), and R&D expenditures (13 percent) (see Chart 8-3). Studies show that all of these activities are correlated with strong productivity performance. (Chapter 2 discusses productivity growth and long-run effects on the standard of living.)

Chart 8-3 **Economic Activities of U.S. Affiliates of Foreign Companies (2004)**
U.S. affiliates account for a high share of U.S. trade, capital expenditures, and R&D expenditures relative to output and employment.



Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), National Science Foundation.

At the firm level, U.S. affiliates pay higher compensation (wages and benefits) on average than their counterparts in the rest of the U.S. economy. In 2004, an average U.S. worker employed by a U.S. affiliate of a foreign-owned firm received $63,400 in annual compensation compared to $48,200 for workers in the rest of the economy. Research suggests that this difference is largely attributable to above-average labor productivity at U.S. affiliates. Part of this productivity advantage reflects these firms' ability to integrate production processes across borders and their organizational efficiency. Another part reflects differences in plant size, capital intensity (that is, higher use of capital relative to other factors, such as labor, in the production process), and employee skill level. The data also suggest that these firms have higher levels of efficiency (how well labor and capital inputs are used), the gains of which are passed on, in part, to workers. In other words, firms can break up their production process across borders to lower average costs and realize increased productivity and revenues, which can be shared with workers through higher compensation and/or captured by firm owners as higher profits (see Box 8-2).

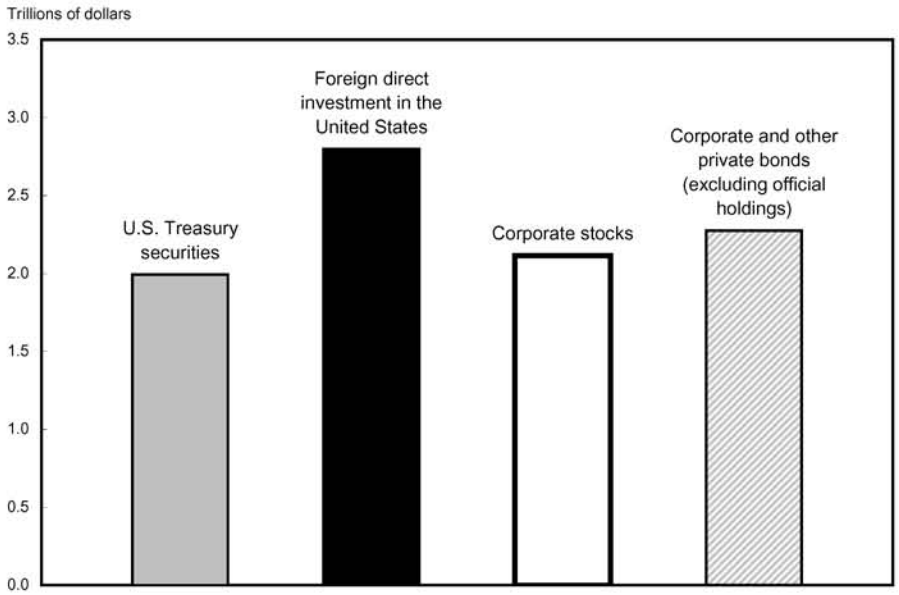
Macroeconomic Benefits to the U.S. Economy

Inward FDI provides a number of benefits to the U.S. economy at the macroeconomic level. For instance, inward FDI is an additional source of investment that helps to modernize the U.S. capital stock. Another benefit is that it provides a source of financing for the U.S. current account deficit, which measures net flows of goods and services between the United States and the rest of the world. As the United States continues to run a current account deficit, foreigners continue to accumulate U.S. assets, and inward FDI is one of the main ways in which they do so.

The accumulation of FDI flows over a period of time results in a stock of assets, or the gross foreign investment position. In 2005, the inward FDI position at market value totaled $2.8 trillion and was the largest component of foreign holdings of U.S. assets. Other components were U.S. Treasury securities ($2 trillion); corporate stocks ($2.1 trillion); and corporate and other private bonds, excluding official holdings ($2.3 trillion) (see Chart 8-4).

The share of foreign holdings is not concentrated in any particular class of assets, which implies a general broad-based confidence in the U.S. economy. Inward FDI is generally considered to be the most stable among the four types of assets shown in Chart 8-4—that is, the least subject to sudden withdrawal. FDI flows are generated by long-term risk–return considerations and are far less liquid and less reversible than portfolio investments. Therefore, FDI flows provide stability to U.S. capital flows because they are not easily reversed for short-term considerations.

Chart 8-4 **Foreign Investment Position in the U.S. by Asset Type (2005)**
Inward FDI (at market value) was the largest component of foreign holdings of U.S. assets in 2005.



Source: Department of Commerce (Bureau of Economic Analysis).

Box 8-2: Multinationals Bring New Products and Processes to the Host Country

The benefits to the U.S. economy from inward FDI mirror those of many other countries. A growing body of evidence across countries and industries demonstrates that globally engaged firms tend to be strong performers—such firms are more productive, pay higher wages, and generate beneficial productivity side effects that accrue to domestic competitors. The three case studies that follow provide a snapshot of the benefits of inward FDI.

Increasing Living Standards in the United States

Infineon Technologies of Munich, Germany, built a state-of-the-art manufacturing plant in Richmond, Virginia, using leading-edge technology to produce dynamic random access memory products that are used in computers. The Richmond company's annual payroll exceeds $100 million, with average wages that are nearly double average Virginia salaries. Over 3,000 North American workers are employed by

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Box 8-2 — *continued*

this German-headquartered multinational, with over 1,750 workers in Richmond alone. The firm has built extensive ties with its customers and suppliers worldwide, and many advanced technology suppliers have emerged in Virginia to support Infineon and other semiconductor firms. Semiconductors are now Virginia's second largest export.

Enhancing Productivity for Mexican Producers and Retailers

One case study documents impressive efficiency gains for Mexico's domestic soap producers once Wal-Mart entered its retail sector. Wal-Mart helped improve Mexico's retail sector by improving the way Mexican retailers interacted with their suppliers. These changes brought about efficiency improvements such as modernization of warehousing, distribution, and inventory management; triggered greater use of information technology in supply management; and required delivery trucks to have appointments and drivers to carry standard identification cards. These innovations have been adopted by other retailers and producers outside of Mexico's soap industry. Mexican soap producers improved their productivity and have gained market share in key export markets, including in the United States.

Improving Banking and Telecommunication Services for Czech Manufacturers

The change toward a freer and more open investment climate in the Czech Republic was followed by the entrance of foreign-owned banks and telecommunication firms. These foreign-owned service providers helped to improve the availability, range, and quality of services. These improved services contributed to better performance of Czech manufacturing firms that rely on services as inputs. For instance, foreign banks accelerated the processing of loan applications, offering decisions to small and medium Czech enterprises within 2 days, compared to a previous waiting period of several weeks. Foreign banks were among the first to offer Internet and remote banking services, including ATMs, which save individual customers and business clients days and sometimes weeks in transaction times. The time needed to send a fax went from hours (or sometimes days for rural areas) to just minutes following the liberalization of the telecommunication sector.

Is Inward FDI on the Decline?

The increase of inward FDI since the late 1980s has coincided with the generally solid performance of the U.S. economy, along with a surge in U.S. worker productivity that has occurred since 1995. Recently, however, some trends have developed with respect to FDI in the United States that may be cause for concern. First, while the U.S. affiliate share of U.S. output has grown over the past two decades, it has stagnated and even declined in recent years. Second, the U.S. affiliate share of employment has declined, from 5.1 percent in 2000 to 4.7 percent in 2004. Third, the share of inward FDI in the U.S. capital account—that is, FDI in the United States as a share of all the assets owned by foreign interests—has declined since 1999. It is not yet clear whether these are benign and temporary trends or whether this development is symptomatic of deeper issues with respect to the attractiveness of the United States as a country in which to make direct investment. To ensure that inward FDI remains a strong, positive force in the U.S. economy, foreign investors in the United States must continue to receive fair and equitable treatment as a matter of both law and practice.

Historically, the United States has opposed the use of government actions that distort, restrict, or place unreasonable burdens on foreign investment. No property can be expropriated pursuant to U.S. law unless it is done for a public use with payment of just compensation. The United States has historically provided a domestic environment conducive to investment by providing foreign investors fair and equitable treatment based on the national treatment principle: foreign investors should be treated no less favorably than domestic investors in like circumstances. Moreover, while taking every necessary step to ensure that foreign investments do not jeopardize national security, the Administration recognizes that our economic vitality depends on our openness.

The Contributions of Outward FDI to the U.S. Economy

A U.S. multinational company is headquartered in the United States and, through outward FDI, has affiliates (often production or marketing facilities) in other countries. Activities of U.S.-headquartered multinationals have contributed strongly to productivity growth in the United States, and thus to rising U.S. living standards.

Because multinationals are engaged in cross-border investment and production networks, they are better able to enhance their organizational efficiency. Studies have shown that multinationals are more productive than firms that are focused primarily on domestic markets. By combining domestic production with foreign production, multinationals can produce at lower costs, earn higher profits, and pay higher wages and benefits. Domestic firms can benefit from outward FDI as multinationals are exposed to the world's best business practices that can be adopted by other U.S. firms.

Basic Facts About U.S. Multinational Companies

U.S. multinationals are relatively small in number but have a disproportionately large economic footprint. Less than 1 percent of U.S. firms are multinationals, but these multinationals account for 20 percent of total U.S. employment and 25 percent of total U.S. output. In 2004, there were 2,369 U.S. multinationals with 22,279 foreign affiliates, with 21.4 million employees in the United States and 9 million workers abroad. The operations of U.S. multinationals are concentrated in the United States. In 2004, the combined value-added output of U.S. multinationals was $3.04 trillion. U.S. parents accounted for over 70 percent of this output and foreign affiliates for less than 30 percent.

While U.S. multinationals have increased employment and output in an absolute sense, their share of the workforce has decreased slightly over the years while their share of output has remained fairly constant. U.S. multinationals employed 18.7 million American workers, or 25 percent of the workforce, in 1982 (the first year for which annual employment data are available). In 2004, those figures stood at 21.4 million workers and 20 percent, respectively. The value of output by U.S. parents was $1.3 trillion or 24 percent of the total private U.S. output in 1994 (the first year for which annual output data are available). In 2004, those figures were $2.2 trillion and 25 percent, respectively. In terms of recent trends, both employment and output by U.S. parents peaked in 2000 and then began to decline. Output rebounded in 2003 and employment rebounded in 2004, largely reflecting economy-wide trends.

Why Do U.S. Firms Become Multinational?

There are three conditions required for a firm to be willing to invest abroad: (1) the firm has specific assets that can be transported to foreign affiliates; (2) the host country has certain characteristics that make it attractive for the firm; and (3) the firm wishes to maintain control over its intellectual assets.

Multinationals often face large costs and barriers to doing business abroad compared with domestic firms in the host country that are familiar with the local business climate. Physical and human capital are needed to establish an affiliate, and additional resources are needed to understand the local business environment (for example, regulations and tax laws, supply networks, cultural differences, and property rights). Thus, a multinational firm must have certain advantages to compensate for these costs. Three types of compensating advantages are commonly cited. One advantage is firm-specific resources or knowledge-based assets and services (such as technology, patents, trademarks, and managerial or engineering expertise) that can be used by the foreign affiliate. Another advantage is the location and characteristics of the host country such as market size, trade costs, and differences in the prices for key inputs such as land, labor, or capital. The existence of a large market or the high costs of trading with a certain country or region can motivate multinationals to produce and sell in foreign countries. Price differences in land, capital, or labor; transportation and telecommunications infrastructure; or good business practices can also motivate a multinational to invest and produce abroad.

The third type of advantage is known as *internalization advantage*. A firm may choose outward FDI over giving a foreign company a license to produce its goods so that it can retain control of its intellectual assets. For example, a firm may be reluctant to reveal the details of its product's construction or its production process to a prospective licensee. There is also the danger that a licensee may produce a lower quality product and consequently reduce the value of the multinational's trademark. The difficulty of guaranteeing quality control, monitoring and managing employees, achieving a satisfactory licensing agreement, and enforcing patent or trademark rights all tend to favor outward FDI.

The Organization of Multinational Production

There are two main organizational strategies for multinational production. One strategy is *vertical FDI,* whereby the multinational geographically fragments the production process and carries out different stages of production at different locations. In contrast, *horizontal FDI* occurs when the multinational conducts the entire production process in the host country to sell locally through its affiliates.

Vertical FDI establishes cross-border production networks. A multinational firm may perform many activities—for example, R&D, assembly, marketing, and sales—that require different mixes of capital, more- or less- skilled labor, land, and other inputs. Separating these activities across borders (and across the parent company and affiliate companies) enables the firm to locate each activity in countries with relatively low costs for each activity's intensively used inputs. Because each stage of the production process is carried out in the optimal location in terms of the input mix, vertical FDI production networks can allow firms to take advantage of differences in comparative advantages across countries and produce at an overall lower unit cost. Trade between U.S. parents and their affiliates ("intra-firm" trade) has risen over time, accounting for 20 percent of total U.S. goods exports in 2004, and 14 percent of total goods imports.

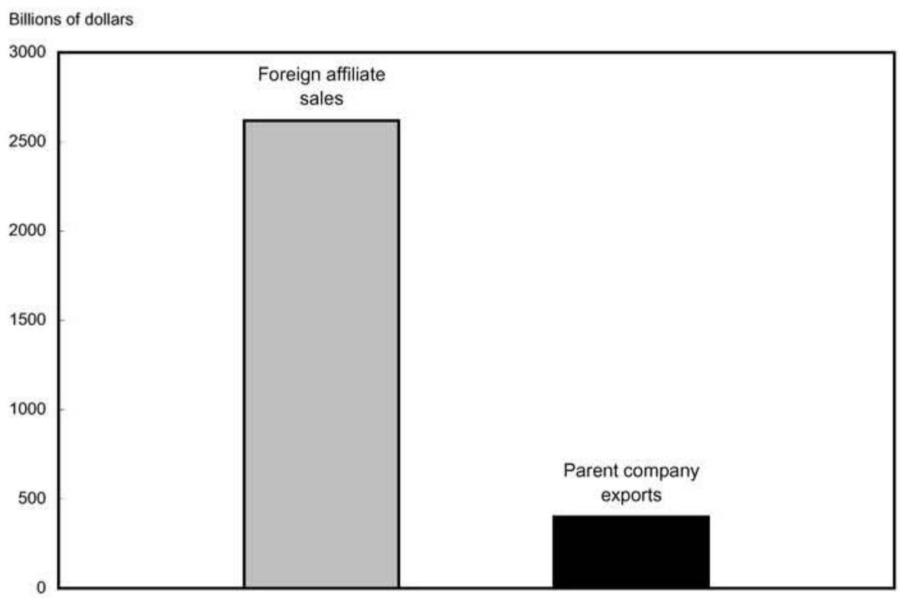
Horizontal FDI can allow U.S. multinationals better access to foreign markets. Ninety-five percent of the world's consumers live outside U.S. borders. Companies can reach foreign markets through FDI or exporting. But for U.S. multinationals, the predominant mode of serving foreign markets is through FDI and affiliate sales (producing and selling locally), not exporting. In 2004, U.S. multinationals sold $2.3 trillion of goods abroad through affiliate sales compared to $400 billion through exports (see Chart 8-5). In other words, for every $1 of exports in goods, U.S. multinational firms sold $5.84 through their foreign affiliates, up from $3.40 ten years earlier.

A common allegation is that U.S. multinationals set up production plants to serve as export platforms back to the United States. However, the data do not support this claim. In 2004, sales by foreign affiliates of U.S. multinationals totaled $3.2 trillion. Most of these sales were to customers outside of the United States; 89.6 percent of total sales were to foreign customers and 10.4 percent were to U.S. customers.

Outward FDI Complements Domestic Economic Activity

Studies show that economic activity abroad by U.S. multinationals complements domestic economic activity. One dollar of additional foreign capital spending is associated with $3.50 of additional domestic capital spending. Firms combine home and foreign production to generate final output at a lower cost than would be possible in just one country, resulting in increased output and profits. Further, when multinationals hire abroad, they also expand employment here at home, making multinationals an important force behind job creation in the United States (see Box 8-3).

Chart 8-5 **U.S. Multinational Goods Sales through Foreign Affiliates and Exports (2004)**
U.S. multinationals serve foreign markets primarily through their foreign affiliates.



Source: Department of Commerce (Bureau of Economic Analysis).

From a broader perspective, U.S. multinationals enhance U.S. competitiveness by engaging in the same activities and possessing the same characteristics that make the U.S. economy competitive in world export markets. Research has shown that the competitiveness of U.S. multinationals tends to be driven by relatively high levels of R&D and highly skilled labor. Studies have also shown that U.S. firms tend to control larger shares of world markets in industries with high levels of R&D and highly skilled labor. Because their competitive interests largely coincide with broader U.S. economic interests, U.S. multinationals make the economy as a whole more competitive.

Box 8-3: U.S. Multinational Companies and U.S. Jobs

In recent years, many observers have expressed dismay that U.S. companies have expanded their operations overseas, claiming that when U.S. firms hire workers in foreign countries, they reduce the number of jobs available to U.S. workers. The idea that U.S. multinationals hiring abroad are "exporting jobs" relies on at least two assumptions: first, that jobs abroad at foreign affiliates are substitutes for domestic jobs at U.S. parent companies; and second, that when U.S. parent companies expand overseas, they do not change the overall scale or scope of their domestic activities. However, in looking at historical data regarding the activity of U.S. multinationals, we see exactly the opposite: when U.S. companies expand their employment abroad, they also tend to expand domestically.

When U.S. Multinationals Hire Abroad They Also Expand Domestic Employment

Over the last two decades (1984–2004), U.S. multinationals expanded employment at their foreign affiliates by 3.8 million and at their parents by 3.2 million (see chart). In other words, the long-run data show that when U.S. multinationals hire abroad they also expand domestic employment. There have been short-run anomalies to this historical trend that largely reflect economic business cycles both here and abroad. For instance, between 1990 and 2000, for each job U.S. multinationals created abroad they created nearly two at home. Between 2000 and 2003, U.S. multinationals continued to expand employment abroad, albeit at a slower pace, while decreasing their U.S. payrolls. Since 2003, both U.S. parent company and affiliate employment have risen.

One study found that as U.S. companies expand employment abroad, increase their compensation of foreign workers, and invest in their overseas operations, they also increase their hiring, employee compensation, and investment in the United States. Thus, rather than being

continued on the next page

Box 8-3 — *continued*

Employment by U.S. Parent Companies and their Majority-Owned Foreign Affiliates
Employment by U.S. parent companies and their foreign affiliates have both grown since the early 1980s.

Sources: Deparment of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics).

substitutes for one another, the domestic and foreign operations of U.S. multinationals have tended to be complements. Consider the operations of General Electric. According to its latest annual report, since 2001 this multinational has expanded foreign employment by 3,000 while also expanding domestic employment by the same amount.

One reason for the complementary relationship between domestic and foreign activity is that a firm may change the overall size of its operations and expand both at home and abroad. Alternatively, a firm may change the scope of its operations and change the mix of its activities (for example, manufacturing, services, or R&D). In fact, it is common for parent companies in one industry to own foreign affiliates in another industry. In 2004, U.S. parent companies primarily engaged in manufacturing owned over 15,000 foreign affiliates, but over 6,500 of these affiliates specialized in areas outside of manufacturing.

In sum, the decision of a firm to expand abroad is based on many factors, and it may be part of a larger overall expansion strategy or a change in the scope of its operations. It is difficult to predict beforehand what such an expansion means for U.S. workers and the U.S. economy. The only way to tell the effect is to examine the data, and thus far the data show that, over the long run, when U.S. multinational firms hire abroad, they also hire at home.

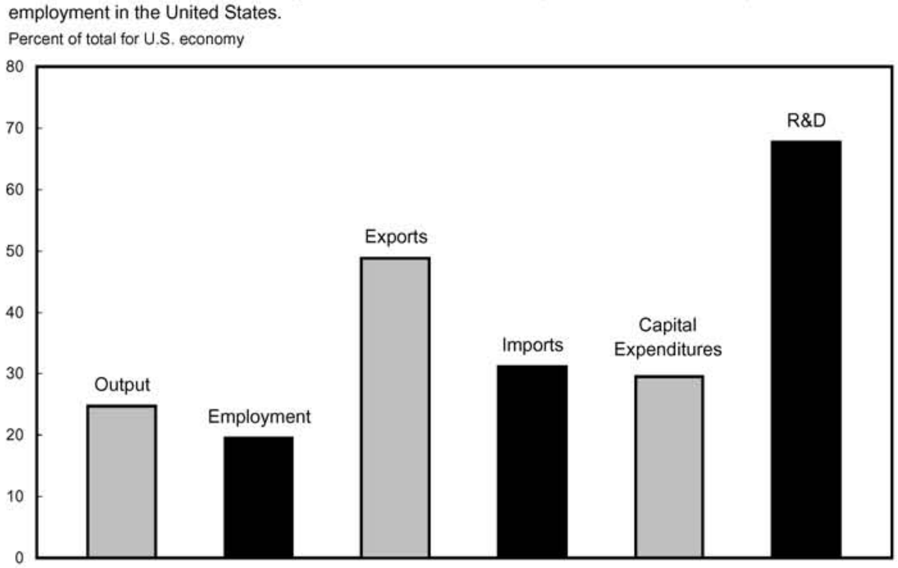
Good Performance Features of U.S. Multinationals

U.S. multinationals differ from the average U.S. firm in a number of ways. For example, while U.S. multinationals account for 25 percent of total U.S. output and 20 percent of employment, they account for a disproportionately high share of U.S. goods exports (49 percent), goods imports (31 percent), physical capital expenditures (29 percent), and research and development (68 percent) (see Chart 8-6). In fact, U.S. affiliates and multinationals combined conduct over 80 percent of all private sector R&D in the United States. Also, the plants operated by these companies tend to be larger in size than the U.S. average. These differences are important because each of them—international trade, capital expenditure, research and development, and plant size—is associated with high labor productivity. And because of the strong link between labor productivity and employee compensation (see Chapter 2), this higher productivity is a potential benefit to U.S. workers.

U.S. multinationals pay higher average compensation than firms in the rest of the economy. In 2004, U.S. workers employed by U.S. parent companies received an average of $57,800 in annual compensation, compared to about $46,800 for workers in the rest of the economy. The relatively high productivity of U.S. multinationals may be one of the causes for the difference in compensation.

Chart 8-6 **Economic Activities of U.S. Multinational Companies (2004)**

U.S. multinationals account for a high share of trade and R&D expenditures relative to output and employment in the United States.



Note: R&D shown is for 2003.
Sources: Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), National Science Foundation.

U.S. multinationals have had high productivity growth over at least the last three decades, and because they make up a sizeable part of the overall U.S. economy, they have been one of the main drivers of overall U.S. productivity growth during this period. U.S. multinationals accounted for over half of U.S. productivity growth between 1977 and 2000, and for half of the *increase* in U.S. productivity growth between 1995 and 2000. During this 5-year period, productivity at U.S. multinationals surged, growing 6.0 percent annually.

Conclusion

Engagement in the global economy through increased trade and investment has contributed to rising average living standards in the United States. Further trade liberalization, particularly in services, could bring even larger gains to American consumers, firms, and workers. Advancing free and fair trade in multilateral, regional, and bilateral negotiations will help to ensure that America continues to derive benefits from international trade. This includes renewal of the Trade Promotion Authority and a successful outcome of current global trade talks, the World Trade Organization's Doha Development Agenda negotiations.

Both inward and outward FDI have contributed to higher levels of productivity in the United States. Inward FDI contributes to productivity growth, provides a source of financing for the current account deficit, and generates high-paying jobs for American workers. Outward FDI is an important channel of market access for U.S. multinational companies. U.S. multinationals are an important force behind job creation in the United States and have contributed to productivity growth and rising average living standards in the U.S. economy.

In order to continue to derive important economic benefits from global economic engagement, the United States must continue to break down barriers to trade and investment abroad, and keep our markets open to international trade and secure protections for foreign investors.